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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,775	03/15/2002	Jean-Christophe Jacques Kling	3206.2.1 NP	4985

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EXAMINER	
DREIDAME, HUNTER M	
ART UNIT	PAPER NUMBER
3633	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/099,775	KLING, JEAN-CHRISTOPHE JACQUES	
	Examiner	Art Unit	
	HUNTER M. DREIDAME	3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the limitations of the values of integers j, k, m, n, q, r, s, and t. As the integers are only restricted in that they are less than three, each integer may be given a value of two, in which case angles ABC and CAB become 252 degrees. Since a triangle is made of three angles summing 180 degrees, such a combination of integers, as given in claim 1, is not possible.

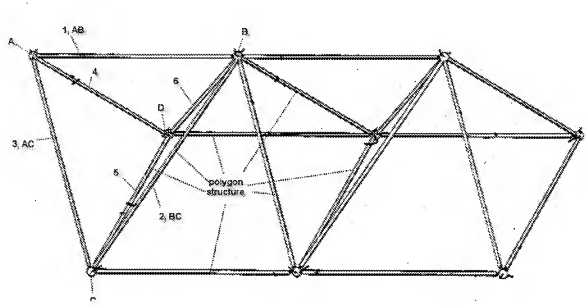
Clarification is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 and 14-24 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 3,789,562 to De Chicchis et al.



Annotated figure taken from de Chicchis, Fig. 1

As to claim 1, de Chicchis et al. disclose an architectural system (Fig. 1) comprising a triangular base (1, 2, 3, annotated figure) comprising first (1, annotated figure), second (2, annotated figure) and third (3, annotated figure) complete struts substantially aligned along first, second, and third axes (AB, BC, and AC, annotated figure) respectively, the axes all contained within a base plane, the first and third axes forming a first base angle (CAB, annotated figure), the first and second axes forming a second base angle (ABC, annotated figure), the second and third axes forming a third acute base angle (BCA, annotated figure), more than one of the struts each comprising at least two rigid pieces (10, 20, 22, Fig. 2) able to move apart so as to produce a strut elongation; a first node (A, annotated figure) engaging the first and third complete struts, the first node large enough to maintain the first base angle, the first base angle

consisting of a first positive value about equal to (j×20.9° + k×31.7° + m×36° + n×37.4°), where j, k, m, and n are each an integer less than three (shown in annotated figure); a second node (B, annotated figure) engaging the first and second complete struts, the second node large enough to maintain the second base angle, the second base angle consisting of a second positive value about equal to (qx20.9° + r×31.7° + sx36° + t×37.4°) , where q, r, s, and t are each an integer less than three (shown in annotated figure); a third node (C, annotated figure) engaging the second and third complete struts, the third node C large enough to maintain the third base angle at a third positive value less than 60° (shown in annotated figure); and an extension (4, 5, or 6, annotated figure) engaging the triangular base and comprising a fourth complete strut substantially aligned along a fourth axis that forms a substantially acute angle > 3° with the base plane (shown in annotated figure).

As to claim 2, de Chicchis et al. disclose the architectural system of claim 1 in which the fourth axis (4, annotated figure) forms an angle DAB with the first axis that is substantially equal to a reference angle selected from a group consisting of 13.3°, 15.5°, 20.9°, 22.2°, 31.7°, 5.3°, 36°, 37.4°, 37.8° , 41.8° , 44.5° , 45° , 54.7° , 58.3° , 60° , 63.4° , 65.9° , 69.1° , 70.5° , 72° , 75.5° , 76.7°, 79.2', 82.2°, 90°, 97.8°, 100.8°, 103.3°, 104.5°, 108°, 109.5°, 110.9°, 114.1°, 116.6°, 120°, 121.7°, 125.3°, 135°, 135.5°, 138.2°, 142.2°, 142.6°, 144°, 144.7°, 148.3°, 155.9°, 157.8° , 159.1° , 164.5° , and 166.7° (shown in annotated figure).

As to claim 3, de Chicchis et al. disclose the architectural system of claim 1 in which the fourth axis (5, annotated figure) forms an angle with the second axis that is

substantially equal to a reference angle selected from a group consisting of 13.3°, 15.5', 20.9°, 22.2°, 31.7°, 35.3°, 36°, 37.4°, 37.8', 41.80, 44.5°, 45°, 54.7°, 58.3°, 60°, 63.4°, 65.9°, 69.1°, 70.5°, 72', 75.5°, 76.7°, 79.2°, 82.2°, 90°, 97.8°, 100.8°, 103.3°, 104.5°, 108°, 109,5°, 110.9', 114.1', 116.6°, 120°, 121.7', 125.3°, 135°, 135.5', 138.2°, 142.2°, 142.6°, 144°, 144.7°, 148.3°, 155.9', 157.8°, 159.1°, 164.5°, and 166.7° (shown in annotated figure).

As to claim 4, de Chicchis et al. disclose the architectural system of claim 1 in which the fourth axis (6, annotated figure) forms a fourth angle with another of the axes that is substantially equal to a reference angle selected from a group consisting of 13.3°, 15.5°, 20.9% 22.2°, 31.7°, 35.3°, 36°, 37.4°, 37.8°, 41.8°, 44.5°, 45°, 54.7% 58.3°, 60°, 63.4°, 65.9°, 69.1°, 70,5°, 72°, 75.5°, 76.7°, 79.2°, 82.2°, 90°, 97.8°, 100.8°, 103.3°, 104.5°, 108°, 109.5% 110.9°, 114.1°, 116.6°, 120°, 121.7°, 125.3°, 135°, 135.5", 138.2°, 142.2°, 142.6°, 144°, 144.7°, 148,3", 155.9°, 157.8°, 159.1°, 164.5° and 166.7° (shown in annotated figure).

As to claim 5, de Chicchis et al. disclose the architectural system of claim 4 in which one of the struts has a maximum diameter D and in which one of the nodes has a radius R that is not less than D/2 (shown in Fig. 2, the diameter of strut, 10, is clearly less than the diameter of node, 14; therefore the radius of the node is greater than D/2).

As to claim 6, de Chicchis et al. disclose the architectural system of claim 4 further comprising a polygon structure (7, annotated figure) coupled to the fourth complete strut (4, annotated figure), the polygon structure having N sides each occupied by a respective complete strut, the third axis containing one of the N sides, the

fourth axis containing another of the N sides wherein the fourth complete strut forms a portion of the polygon structure (shown in annotated figure).

As to claim 7, de Chicchis et al. disclose the architectural system of claim 4 in which j=O (shown in annotated figure).

As to claim 8, de Chicchis et al. disclose the architectural system of claim 4 in which j and q are both even (shown in annotated figure).

As to claim 9, de Chicchis et al. disclose the architectural system of claim 4 in which j=1 (shown in annotated figure).

As to claim 10, de Chicchis et al. disclose the architectural system of claim 4 in which n and t are both even.

As to claim 11, de Chicchis et al. disclose the architectural system of claim 4 in which each of the nodes has a radius R and in which each of the struts has a respective diameter less than 2R (shown in Fig. 2, the diameter of strut, 10, is clearly less than the diameter of node, 14; therefore the diameter of the strut is less than 2R).

As to claim 12, de Chicchis et al. disclose the architectural system of claim 4 in which the second node includes first and second couplings (18, Fig. 2) respectively engaging the first and second complete struts, the first coupling capable of retaining the first strut under a tension of 100 Newtons along the first axis (A.B), the second coupling capable of retaining the second strut under a tension of 100 Newtons along the second axis (BC).

As to claim 14, de Chicchis et al. disclose the architectural system of claim 4 in which m=O (shown in annotated figure).

As to claim 15, de Chicchis et al. disclose the architectural system of claim 1 in which m=0 (shown in annotated figure).

As to claim 16, de Chicchis et al. disclose the architectural system of claim 1 in which j is not equal to q (shown in annotated figure).

As to claim 17, de Chicchis et al. disclose the architectural system of claim 1 in which q is less than 2 (shown in annotated figure).

As to claim 18, de Chicchis et al. disclose the architectural system of claim 1 in which k=O (shown in annotated figure).

As to claim 19, de Chicchis et al. disclose the architectural system of claim 1 in which k and r are both even (shown in annotated figure).

As to claim 20, de Chicchis et al. disclose the architectural system of claim 1 in which k is not equal to 1 (shown in annotated figure).

As to claim 21, de Chicchis et al. disclose the architectural system of claim 1 in which n = t (shown in annotated figure).

As to claim 22, de Chicchis et al. disclose the architectural system of claim 1 in which j=0 (shown in annotated figure).

As to claim 23, de Chicchis et al. disclose the architectural system of claim 1 in which j and q are both even (shown in annotated figure).

As to claim 24, de Chicchis et al. disclose the architectural system of claim 1 in which j=1 (shown in annotated figure).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 3,789,562 to de Chicchis et al.

As to claim 13, de Chicchis et al. disclose the claimed invention except for the architectural system being made of non-metallic material. It would have been a matter of obvious design choice to form the architectural system out of non-metallic material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 233.

Response to Arguments

Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNTER M. DREIDAME whose telephone number is (571)272-5177. The examiner can normally be reached on Monday - Friday 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Canfield can be reached on (571)272-6840. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot/
Supervisory Patent Examiner, Art Unit 3635

/Hunter M Dreidame/
Examiner, Art Unit 3633